Amendments to the Claims

1. **(Currently Amended)** An information processing apparatus ~~apparatus~~, comprising:

a clock generator for generating a ~~clock~~ clock;

a clock controller for controlling the clock generated by the clock generator to determine a clock ~~frequency~~ frequency;

a storage device for storing a ~~software~~ software;

a computing device for implementing the software obtained from the storage device in accordance with the clock supplied via the clock ~~controller~~ controller;

a specific processing section detector for detecting ~~the~~ a start and an end of a specific processing section which is a section during which a predetermined specific processing is ~~executed~~ executed; and

a clock control judging device for outputting a command to control the clock frequency to the clock controller in accordance with a result obtained by the specific processing section detector, wherein

~~wherein~~ the specific processing section detector is operable to detect the start of the specific processing section upon entering the specific processing section from a normal processing section during which the specific processing is not executed and the end of the specific processing section upon returning from the specific processing section to the normal processing section, and

the clock control judging device ~~commands the~~ is operable to command clock controller to increase the clock frequency if the specific processing section detector has detected the start of the specific processing section ~~while commanding the~~ and command the clock controller to decrease the clock frequency if the specific processing section detector has detected the end of the specific processing section.

2. **(Currently Amended)** An information processing apparatus according to claim 1, wherein the specific processing section ~~is a~~ includes an exclusive processing section during which an exclusive processing is executed.

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3. **(Original)** An information processing apparatus according to claim 1, wherein the specific processing section is a predetermined specific section out of a plurality of sections during which exclusive processings are executed.

4. **(Currently Amended)** An information processing apparatus according to claim 1, further comprising a power-source controller for controlling a voltage to be supplied to the computing device and the storage device upon obtaining clock frequency information from the clock controller,

wherein the power-source controller ~~increases~~ is operable to increase the voltage when the clock frequency is increased ~~while decreasing~~ and decrease the voltage when the clock frequency is decreased.

5. **(Currently Amended)** An information processing apparatus according to claim 4, wherein the clock controller ~~increases~~ is operable to increase the clock frequency in a stepwise manner within a range where the computing device is operable as the voltage is increased by the power-source controller.

6. **(Currently Amended)** An information processing apparatus according to claim 4, wherein the clock control judging device is operable to:

~~predicts~~ predict a specific processing time, which is a time up to the end of the specific processing section, based on a previous specific processing time required for a previous specific processing if the specific processing section detector has detected the start of the specific processing section, and

~~notifies a~~ output an increasing command ~~to increase~~ for increasing the clock frequency to the clock controller when the predicted specific processing time exceeds a threshold ~~value,~~ ~~and~~ value.

~~does not notify the command to increase the clock frequency to the clock controller when the predicted specific processing time is below the threshold value.~~

7. **(Currently Amended)**   An information processing apparatus according to claim 6, wherein the clock control judging device ~~sets~~ is operable to set a time dependent on and equal to or longer than a voltage-increasing time required for the power-source controller to increase the voltage as the threshold value.

8. **(Currently Amended)**   An information processing apparatus according to claim ~~7~~ 6, wherein the clock control judging device ~~sets~~ is operable to set a time dependent on and equal to or longer than a sum of ~~the~~ a voltage-increasing time required for the power-source controller to increase the voltage and a voltage-decreasing time required for the power-source controller to decrease the voltage as the threshold value.

9. **(Currently Amended)**   An information processing apparatus according to claim 6, wherein the clock control judging device ~~sets~~ is operable to set a time dependent on and equal to or longer than a frequency-increasing time required for the clock controller to increase the clock frequency as the threshold value.

10. **(Currently Amended)**   An information processing apparatus according to claim ~~9~~ 6, wherein the clock control judging device ~~sets~~ is operable to set a time dependent on and equal to or longer than a sum of ~~the~~ a frequency-increasing time required for the clock controller to increase the clock frequency and a frequency-decreasing time required for the clock controller to decrease the clock frequency as the threshold value.

11. **(Currently Amended)**   An information processing apparatus according to claim 4, wherein the clock control judging device is operable to:

~~predicts~~ predict a low-speed specific processing time which is a low-speed time up to the end of the specific processing section when the clock frequency is kept low and a high-speed specific processing time which is a high-speed time up to the end of the specific processing section when the clock frequency is increased, based on a previous specific processing time required for a previous specific processing if the specific processing section detector has detected the start of the specific processing section, and

notifies a output an increasing command to increasefor increasing the clock frequency to the clock controller when the predicted low-speed specific processing time exceeds a threshold value dependent on and equal to or longer than a sum of the predicted high-speed specific processing time and a voltage-changing time required for the power-source controller to increase and decrease the voltage, voltage.

and does not notify the command to increase the clock frequency to the clock controller when the predicted low-speed specific processing time is below the threshold value.

12. **(Currently Amended)** An information processing apparatus according to claim 4, wherein the clock control judging device is operable to:

predicts predict a low-speed specific processing time which is a low-speed time up to the end of the specific processing section when the clock frequency is kept low and a high-speed specific processing time which is a high-speed time up to the end of the specific processing section when the clock frequency is increased, based on a previous specific processing time required for a previous specific processing if the specific processing section detector has detected the start of the specific processing section, and

notifies a output an increasing command to increasefor increasing the clock frequency to the clock controller when the predicted low-speed specific processing time exceeds a threshold value dependent on and equal to or longer than a sum of the predicted high-speed specific processing time and a frequency-changing time required for the clock controller to increase and decrease the clock frequency, frequency.

and does not notify the command to increase the clock frequency to the clock controller when the predicted low-speed specific processing time is below the threshold value.

13. **(Currently Amended)** An information processing apparatus according to claim 4, wherein the clock control judging device is operable to:

predicts predict a high-speed specific processing time, which is a high-speed time up to the end of the specific processing section when the clock frequency is increased within a predetermined range, and a low-speed specific processing time, which is a low-speed time up to the end of the specific processing section when the clock frequency is kept low, based on a

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previous specific processing time required for a previous processing if the specific processing section detector has detected the start of the specific processing section, and

notifies a output an increasing command to increasefor increasing the clock frequency to an effective frequency to the clock controller when the effective frequency, at which the predicted low-speed specific processing time is longer than a threshold value dependent on and equal to or longer than a sum of the predicted high-speed specific processing time and a voltage-changing time required for the power-source controller to increase and decrease the voltage, lies within the predetermined range, range.

and does not notify the command to increase the clock frequency to the clock controller when the effective frequency lies beyond the predetermined range.

14. **(Currently Amended)** An information processing apparatus according to claim 13, wherein the clock control judging device, if a plurality of frequencies as the effective frequency lie within the predetermined range, then notifies is operable to output a highest increasing command to increasefor increasing the clock frequency up to the a highest one of the plurality of frequencies to the clock controller.

15. **(Currently Amended)** An information processing apparatus according to claim 4, wherein the clock control judging device is operable to:

predicts predict a high-speed specific processing time, which is a high-speed time up to the end of the specific processing section when the clock frequency is increased within a predetermined range, and a low-speed specific processing time, which is a low-speed time up to the end of the specific processing section when the clock frequency is kept low, based on a previous specific processing time required for a previous processing if the specific processing section detector has detected the start of the specific processing section, and

notifies a output an increasing command to increasefor increasing the clock frequency to an effective frequency to the clock controller when the effective frequency, at which the predicted low-speed specific processing time is longer than a threshold value dependent on and equal to or longer than a sum of the predicted high-speed specific processing time and a frequency-changing time required for the clock controller to increase and decrease the clock frequency, lies within the predetermined range, and range.

~~does not notify the command to increase the clock frequency to the clock controller when the effective frequency lies beyond the predetermined range.~~

16. **(Currently Amended)** An information processing apparatus according to claim 4, wherein the clock control judging device is operable to:

~~predicts~~ predict a low-speed nonspecific processing time, which is a low-speed time up to ~~the~~ a next detection of the start of the specific processing section when the clock frequency is decreased, based on a previous processing time required for a previous processing if the specific processing section detector has detected the end of the specific processing time, and

~~notifies~~ output a decreasing command ~~to decrease~~ for decreasing the clock frequency to the clock controller when the predicted low-speed nonspecific processing time exceeds a threshold value ~~and does not notify the command to decrease the clock frequency to the clock controller when the predicted low-speed nonspecific processing time is below the threshold value~~.

17. **(Currently Amended)** An information processing apparatus according to claim 16, wherein the clock control judging device ~~sets~~ is operable to set a time dependent on and equal to or longer than a voltage-decreasing time required for the power-source controller to decrease the voltage as the threshold value.

18. **(Currently Amended)** An information processing apparatus according to claim ~~17~~16, wherein the clock control judging device ~~sets~~ is operable to set a time dependent on and equal to or longer than a sum of ~~the voltage-decreasing time~~a voltage-decreasing time required for the power-source controller to decrease the voltage and a voltage-increasing time required for the power-source controller to increase the voltage as the threshold value.

19. **(Currently Amended)** An information processing apparatus according to claim 16, wherein the clock control judging device ~~sets~~ is operable to set a time dependent on and equal to or longer than a frequency-decreasing time required for the clock controller to decrease the clock frequency as the threshold value.

20. **(Currently Amended)** An information processing apparatus according to claim ~~19~~16, wherein the clock control judging device ~~sets~~ is operable to set a time dependent on and equal to or longer than a sum of ~~the frequency-decreasing time~~a frequency-decreasing time required for the clock controller to decrease the clock frequency and a frequency-increasing time required for the clock controller to increase the clock frequency as the threshold value.

21. **(Currently Amended)** An information processing apparatus according to claim 4, wherein the clock control judging device is operable to:

~~predicts~~predict a low-speed nonspecific processing time, which is a low-speed time up to ~~the~~a start of ~~the~~a next specific processing section when the clock frequency is decreased within a predetermined range, based on a previous processing time required for a previous processing other than the specific processing if the specific processing section detector has detected the end of the specific processing section, and

~~notifies~~output a decreasing command ~~to decrease~~for decreasing the clock frequency to an effective frequency to the clock controller when the effective frequency, at which the predicted low-speed nonspecific processing time is longer than a threshold value dependent on and equal to or longer than a voltage-changing time required for the power-source controller to decrease and increase the voltage, lies within the predetermined ~~range, and~~range.

~~does not notify the command to decrease the clock frequency to the clock controller when the effective frequency lies beyond the predetermined range.~~

22. **(Currently Amended)** An information processing apparatus according to claim 21, wherein the clock control judging device, if a plurality of frequencies as the effective frequency lie within the predetermined range, ~~then notifies~~is operable to output a lowest decreasing command ~~to decrease~~for decreasing the clock frequency down to ~~the~~a lowest one of the plurality of frequencies to the clock controller.

23. **(Currently Amended)** An information processing apparatus according to claim 4, wherein the clock control judging device is operable to:

~~predicts~~predict a low-speed nonspecific processing time, which is a low-speed time up to ~~the~~a start of ~~the~~a next specific processing section when the clock frequency is decreased

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within a predetermined range, based on a <u>previous processing</u> time required for a previous processing other than the specific processing if the specific processing section detector has detected the end of the specific processing section, <u>and</u>

~~notifies~~ <u>output</u> a <u>decreasing</u> command ~~to decrease~~<u>for decreasing</u> the clock frequency to an effective frequency to the clock controller when the effective frequency, at which the predicted low-speed nonspecific processing time is longer than a threshold value dependent on and equal to or longer than a frequency-changing time required for the clock controller to decrease and increase the clock frequency, lies within the predetermined ~~range, and~~ <u>range.</u>

~~does not notify the command to decrease the clock frequency to the clock controller when the effective frequency lies beyond the predetermined range.~~

24.   **(Currently Amended)**   An electrical apparatus comprising an information processing ~~apparatus,~~ <u>apparatus</u> comprising:

a clock generator for generating a ~~clock,~~ <u>clock;</u>

a clock controller for controlling the clock generated by the clock generator to determine a clock ~~frequency,~~ <u>frequency;</u>

a storage <u>device</u> for storing ~~a software,~~ <u>software;</u>

a computing device for implementing the software obtained from the storage<u>device</u> in accordance with the clock supplied via the clock ~~controller,~~ <u>controller;</u>

a specific processing section detector for detecting ~~the~~ <u>a</u> start and <u>an</u> end of a specific processing section which is a section during which a predetermined specific processing is ~~executed,~~ <u>executed;</u> and

a clock control judging device for outputting a command to control the clock frequency to the clock controller in accordance with a result obtained by the specific processing section detector, <u>wherein</u>

~~wherein~~ <u>the specific processing section detector is operable to detect the start of the specific processing section upon entering the specific processing section from a normal processing section during which the specific processing is not executed and the end of the specific processing section upon returning from the specific processing section to the normal processing section, and</u>

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the clock control judging device ~~commands~~ is operable to command the clock controller to increase the clock frequency if the specific processing section detector has detected the start of the specific processing section ~~while commanding~~ and command the clock controller to decrease the clock frequency if the specific processing section detector has detected the end of the specific processing section.

25. **(Currently Amended)** A clock controlling method for an information processing apparatus, the clock controlling method comprising:

a specific processing section detecting step of detecting ~~the~~ a start and an end of a specific processing section which is a section during which a predetermined specific processing is ~~executed,~~ executed; and

a clock controlling step of increasing a clock frequency of the information processing apparatus when the start of the specific processing section is detected in the specific processing section detecting step ~~while~~ and decreasing the clock frequency when the end of the specific processing section is detected in the specific processing section detecting ~~step~~ step,

wherein the specific processing section detecting step includes a step of detecting the start of the specific processing section upon entering the specific processing section from a normal processing section during which the specific processing is not executed and the end of the specific processing section upon returning from the specific processing section to the normal processing section.

26. **(Canceled)**

27. **(Currently Amended)** A clock controlling program ~~product, comprising~~ stored on a storage medium for use in an information processing apparatus, the clock controlling program comprising:

~~a clock controlling program for causing an information processing apparatus to realize:~~

a specific processing section detecting function of detecting ~~the~~ a start and an end of a specific processing section which is a section during which a predetermined specific processing is ~~executed,~~ executed; and

a clock controlling function of increasing a clock frequency of the information processing apparatus when the start of the specific processing section is detected in the specific processing section detecting function ~~while~~ and decreasing the clock frequency when the end of the specific processing section is detected in the specific processing section detecting function, ~~and~~

~~a signal holding medium for holding the program~~

wherein the specific processing section detecting function includes a function of detecting the start of the specific processing section upon entering the specific processing section from a normal processing section during which the specific processing is not executed and the end of the specific processing section upon returning from the specific processing section to the normal processing section.

28. **(Canceled)**